PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Douglas R. Adler et al.	Examiner: Joshua D. Campbell
Serial No.: 09/576,754	Group Art Unit: 2178
Filed: May 23, 2000	Docket: 2050.028US1

For: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

APPEAL BRIEF UNDER 37 CFR § 41.37

Mail Stop Appeal Brief- Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The Appeal Brief is presented in support of the Notice of Appeal to the Board of Patent Appeals and Interferences, filed on September 6, 2005, and in response to the Notice of Panel Decision from Pre-Appeal Brief Review mailed October 25, 2005, from the Final Rejection of claims 1-20 and 22-35 of the above-identified application, as set forth in the Final Office Action mailed on June 28, 2005.

The Commissioner of Patents and Trademarks is hereby authorized to charge Deposit Account No. 19-0743 in the amount of 500.00 which represents the requisite fee set forth in 37 C.F.R. § 41.2(b)(2). The Appellants respectfully request consideration and reversal of the Examiner's rejections of pending claims.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

TABLE OF CONTENTS

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 2
Dkt: 2050.028US1

1. REAL PARTY IN INTEREST

The real party in interest of the above-captioned patent application is the assignee, SPYGLASS, INC., by virtue of an Assignment from inventors Douglas R. Adler, Gregory J. Nawrocki, Peter A. Korp and Masakatsu Yoneda recorded August 10, 2000 on Reel 011086, Frame 0990.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 3
Dkt: 2050.028US1

2. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellants that will have a bearing on the Board's decision in the present appeal.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 4
Dkt: 2050.028US1

3. STATUS OF THE CLAIMS

The present application was filed on May 23, 2000 with claims 1-30. In response to a non-final Office Action mailed December 31, 2003, claim 21 was cancelled. An Amendment filed with an RCE in response to the Final Office Action mailed July 27, 2004, added claims 31-35.

Claims 1-20 and 22-35 stand twice rejected, remain pending, and are the subject of the present Appeal.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 5
Dkt: 2050.028US1

4. STATUS OF AMENDMENTS

No amendments have been made subsequent to the Final Office Action dated June 28, 2005.

5. SUMMARY OF CLAIMED SUBJECT MATTER

The present application addressed the problem of processing and displaying electronic content on electronic devices having limited resources (e.g., cell phone memory). Specifically, electronic devices having limited memory can only store one or two font types for one or two languages, which may or may not be adequate to process and display the received electronic content. Because of the electronic devices limited resources (e.g., memory), the device cannot just merely download the entire font set to process and display the electronic content. For example, the device may not be able to store an entire font set of characters (e.g., Chinese pictograph symbols), where individual glyphs of the font set are used to create a multitude of unique pictographs. (page 5, lines 15-21 to page 6, lines 1- 10)

Claim 1 recites a method 22 for dynamic font subsetting (fig. 2, page 17, lines 3-4). An intermediate network device 18 (fig. 1, page 10, line 17 to page 11, line 10) receives, over a first network, a first request for requested electronic content from an electronic device 12 (fig. 1, page 10, lines 8-12, fig. 2, operation 24, page 17, lines 4-6, 17-20 to page 18, lines 1-9). The intermediate network device 18 obtains the requested electronic content from a second network 14 (fig. 1, page 10, lines 13-16), the requested electronic content including a plurality of characters in one or more desired languages (fig. 2, operation 26, page 17, lines 6-7, page 18, line 10 to page 19, line 4). The intermediate network device 18 scans the requested electronic content to identify one or more sets of glyphs in the requested electronic content used for the plurality of characters in the one or more desired languages (fig. 2, operation 28, page 17, lines 7-9, page 19, lines 5-8). The intermediate network device 18 creates one or more glyph sub-sets for the one or more identified sets of glyphs, wherein the one or more glyph sub-sets include the sets of glyphs identified in the requested electronic content (fig. 2, operation 30, page 17, lines 9-11, page 19, line 9 to page 21, line 4). The intermediate network device 18, responsive to the scanning of the requested electronic content and the creating of the one or more glyph sub-sets, inserts one or more directives in the requested electronic content

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 7
Dkt: 2050.028US1

to identify the one or more glyph sub-sets, thereby creating modified electronic content, wherein a directive from the one or more directives identifies a set of glyphs from the one or more sets of glyphs identified in the requested electronic content and a pre-determined encoding scheme used to encode the set of glyphs (fig. 2, operation 32, page 17, lines 11-16, page 21 line 5 to page 23, line 18). The intermediate network device 18 sends the modified electronic content to the electronic device 12 over the first network (fig. 2, operation 34, page 17, line 16, page 23, lines 2-18).

Independent claim 8 recites a method for dynamic font subsetting (fig. 2, page 17, lines 3-4, fig. 3, lines 3-4). An intermediate network device 18 (fig. 1, page 10, line 17 to page 11, line 10) identifies a glyph set in a requested electronic content obtained by the intermediate network device 18 in response to a first request received over a first network from an electronic device 12 (fig. 1, page 10, lines 8-12, page 17, lines 4-6, 17-20 to page 18, lines 1-9), wherein the intermediate network device 18 obtained the requested electronic content over a second network in response to the first request (page 17, lines 6-7, page 18, line 10 to page 19, line 4). The intermediate network device 18 identifies a glyph sub-set from the glyph set, the glyph sub-set including glyphs identified in the requested electronic content (page 17, lines 9-11, page 19, line 9 to page 21, line 4). The intermediate network device 18 inserts one or more directives into the requested electronic content to create modified electronic content, the one or more directives identifying the glyph set and a pre-determined encoding scheme used to encode the glyph set (page 17, lines 11-16, page 21 line 5 to page 23, line 18). The intermediate network device 18 receives a second request from the electronic device 12 for the glyph sub-set, the request being generated by the electronic device 12 as a result of the one or more directives (fig. 3, operation 38, page 24, lines 4-10, 16-20). The intermediate network device 18 obtains the glyph sub-set (fig. 3, operation 40, page 24, lines 10-11, page 25, lines 3-16) and sends the glyph sub-set to the electronic device 12 over the first network to allow the electronic device 12 to display glyphs in the modified electronic content (fig. 3, operation 42, page 24, lines 11-13, page 25, line 17 to page 26, line 4).

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 8
Dkt: 2050.028US1

Independent claim 15 recites a method for dynamic font subsetting (fig. 4, lines 10-11). An electronic device 12 (fig. 1, page 10, lines 8-12, page 17, lines 4-6, 17-20 to page 18, lines 1-9) sends a first request for electronic content to an intermediate network device 18 (fig. 1, page 10, line 17 to page 11, line 10) over a first network (fig. 4, operation 46, page 26, lines 11-12, page 27, lines 5-6). Responsive to the sending of the first request for the electronic content, the electronic device 12 receives modified electronic content from the intermediate network device 18 over the first network, wherein the modified electronic content is created responsive to the first request and includes the electronic content obtained by the intermediate network device over a second network, and one or more directives determined by the intermediate network device, wherein a directive identifies a glyph sub-set including a set of glyphs identified in the modified electronic content and a pre-determined encoding scheme used to encode the set of glyphs (fig. 4, operation 48, page 26, lines 12-16, page 27, lines 6-10). The electronic device 12 processes the modified electronic content, thereby identifying the one or more directives (fig. 4, operation 50, page 26, lines 16-17, page 27, lines 10-11) The electronic device 12 sends at least one second request to the intermediate network device 18 based on the one or more identified directives to request one or more glyph sub-sets to allow the electronic device 12 to display the modified electronic content (fig. 4, operation 52, page 26, lines 17-20, page 27, lines 11-14). The electronic device 12 receives one or more glyph sub-sets from the intermediate network device 18 in response to the at least one second request (fig. 4, operation 54, page 26, line 20, page 27, lines 14-16). The electronic device 12 displays the modified electronic content using the one or more glyph sub-sets (fig. 4, operation 56, page 27, lines 1-2, lines 16-17).

Independent claim 22 recites a method for dynamic font subsetting (fig. 5, lines 3-4). An electronic device 12 (fig. 1, page 10, lines 8-12, page 17, lines 4-6, 17-20 to page 18, lines 1-9) reads modified electronic content from local storage 16 (fig. 1, lines 8-12) on the electronic device 12, wherein the modified electronic content includes requested electronic content and one or more directives, wherein a directive from the one or more directives identifies a glyph sub-set including a set of glyphs identified in the requested electronic content and a pre-determined encoding scheme used to encode the set of glyphs (fig. 5, operation 60, page 28, lines 4-8). The electronic device 12 processes the modified electronic content, thereby identifying the one or more directives, the directives being inserted in the requested electronic content to create the modified electronic content (fig. 5, operation 62, page 28, lines 8-9). The electronic device 12 determines from the one or more directives whether a desired glyph sub-set can be obtained from local storage 16 on the electronic device 12 (fig. 5, operation 64, page 28, lines 9-11), and if not, sends one or more requests over a network to an intermediate network device 18 to obtain glyph sub-sets that cannot be obtained from local storage 16 on the electronic device 12 (fig. 5, operation 66, page 28, lines 12-14), receives, from the intermediate network device 18 over the network, the glyph sub-sets that cannot be obtained from local storage 16 from the intermediate network device 18 on the electronic device 12 (fig. 5, operation 68, page 28, lines 15-16). The electronic device 12 then displays the modified electronic content on the electronic device using the glyph sub-sets obtained from the intermediate network device 18 (fig. 5, operation 70, page 28, lines 16-17).

Independent claim 28 recites a dynamic font subsetting system (fig. 1, page 10, lines 4-12). Modified electronic content including requested electronic content as obtained by an intermediate network device 18 over a first network and sent to an electronic device 12 over a second network 14 in response to a first request from the electronic device for the requested electronic content, and further including one or more directives for identifying one or more glyph sub-sets, the one or more glyph sub-sets including sets of glyphs identified in the requested electronic content, and one or more pre-determined encoding schemes used to encode the sets of glyphs, wherein the sets of glyphs are used to represent a plurality of characters in one or more desired languages included within the requested electronic content (fig. 1, page 10, lines 17-21, page 11, lines 3-4, fig. 2, lines 3-16). The electronic device 12 to request the requested electronic content and to receive and display the modified electronic content, wherein the electronic device does not have stored information for all glyphs for all characters in the one or more desired languages (fig. 1, page 11, lines 3-4, fig. 2, lines 3-16).

Independent claim 31 recites a method performed by an intermediate network device 18 (fig. 1, page 10, lines 17-20) and is substantially similar to independent claim 1 described above. The intermediate network device 18 receives, over a first network, a first request for requested electronic content from a portable electronic device 12 (fig. 1, page 10, lines 10-12, fig. 2, page 17, lines 3-16) and obtains the requested electronic content from a second network 14, wherein the requested electronic content includes a plurality of characters in one or more desired languages (fig. 2, page 17, lines 3-16). The intermediate network device 18 scans the requested electronic content to identify one or more sets of glyphs in the requested electronic content used for the plurality of characters and creates one or more glyph sub-sets for the one or more identified sets of glyphs, wherein the one or more glyph sub-sets include glyphs identified in the requested electronic content (fig. 2, page 17, lines 3-16). The intermediate network device 18 inserts one or more directives in the requested electronic content to identify the one or more glyph sub-sets, thereby creating modified electronic content, and sends the modified electronic content to the electronic device over the first network (fig. 2, page 17, lines 3-16).

Independent claim 34 recites a method performed by an electronic device 12 (fig. 1, lines 8-12) and is substantially similar to independent claim 15 discussed above. The electronic device 12 sends a first request for electronic content to an intermediate network device 18 over a first network (fig. 4, page 26, lines 10-12). The electronic device 12 responsive to the sending of the first request, receives modified electronic content from the intermediate network device 18 over the first network, wherein the modified electronic content is created responsive to the first request, and includes the electronic content obtained by the intermediate network device 18 over a second network 14, and one or more directives, which identify one or more glyph sub-sets corresponding to a set of glyphs identified by the intermediate network device 18 from the electronic content (fig. 4, page 26, lines 12-17) and sends at least one second request to the intermediate network device 18, based on the one or more directives, to request the one or more glyph sub-sets (fig. 4, page 26, lines 17-20). The electronic device 12 receives the one or more glyph sub-sets from the intermediate network device 18 in response to the at least one second request, and displays the modified electronic content using the one or more glyph sub-sets (fig. 4, page 26, line 20 to page 27, line 2).

This summary does not provide an exhaustive or exclusive view of the present subject matter, and Appellants refer to the appended claims and its legal equivalents for a complete statement of the invention.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 12
Dkt: 2050.028US1

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 15-18, 20, 22-23, and 25-27 were rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. (US Patent Number 5,781,714, issued on July 14, 1998) in view of Lipton (US Patent Number 5,940,581, issued on August 17, 1999).

Claims 1-14 and 28-35 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Simon et al. (US Patent Number 6,065,008, filed on October 1, 1997) in view of Collins et al. (US Patent Number 5,781,714, issued on July 14, 1998) further in view of Lipton (US Patent Number 5,940,581, issued on August 17, 1999).

7. ARGUMENT

A) The Applicable Law

The Examiner has the burden under 35 U.S.C. 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). As part of establishing a *prima facie* case of obviousness, the Examiner must show that some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art would lead an individual to combine the relevant teaching of the references. *Id*.

The court in *Fine* stated that:

> Obviousness is tested by "what the combined teaching of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 878 (CCPA 1981)). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." *ACS Hosp. Sys.*, 732 F.2d at 1577, 221 USPQ at 933. And "teachings of references can be combined *only* if there is some suggestion or incentive to do so."

Id. (emphasis in original).

The M.P.E.P. adopts this line of reasoning, stating that:

> "In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellant s disclosure. *In re Vaeck* , 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991))". *M.P.E.P.* 2142. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA, 1974). MPEP §2143.

The Office Action must provide specific, objective evidence of record for a finding of a suggestion or motivation to combine reference teachings and must explain

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 14
Dkt: 2050.028US1

the reasoning by which the evidence is deemed to support such a finding. *In re Sang Su Lee*, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002).

The test for obviousness under § 103 must take into consideration the invention as a whole; that is, one must consider the particular problem solved by the combination of elements that define the invention. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985). The Examiner must, as one of the inquiries pertinent to any obviousness inquiry under 35 U.S.C. § 103, recognize and consider not only the similarities but also the critical differences between the claimed invention and the prior art. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990), *reh'g denied*, 1990 U.S. App. LEXIS 19971 (Fed. Cir. 1990). Finally, the Examiner must avoid hindsight. *Id.*

When determining obviousness, "the [E]xaminer can satisfy the burden of showing obviousness of the combination 'only by showing some objective teaching in the prior art or individual to combine the relevant teachings of the references". *In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002), citing *In re Fritch*, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence." *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617. "Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact." *Dembiczak*, 175 F.3d at 999, 50 USPQ2d at 1617, citing *McElmurry v. Arkansas Power & Light Co.*, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. MPEP §2143.03.

B) Discussion of the rejection of claims 15-18, 20, 22-23, and 25-27 under 35 U.S.C. § 103(a) as being unpatentable over Collins et al. (US Patent Number 5,781,714, issued on July 14, 1998) in view of Lipton (US Patent Number 5,940,581, issued on August 17, 1999).

Claims 15-18, 20, 22-23, and 25-27 were rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. (US Patent Number 5,781,714, issued on July 14, 1998, hereinafter "Collins") in view of Lipton (US Patent Number 5,940,581, issued on August 17, 1999, hereinafter "Lipton"). This rejection is respectfully traversed. The combination of the references does not teach or suggest each and every element of the claims.

The present application describes processing a request for electronic content and creating modified electronic content that may be displayed on electronic devices having limited resources (e.g., a cell phone). Specifically, electronic devices having limited memory can only store one or two font types for one or two languages, which may or may not be adequate to process and display the desired electronic content.

The Collins reference uses a character shape recorder (CSR) of a first computer to create a new font description for any shape described to it as a sequence of moves, lines, and quadratic and cubic Bezier curves, it can create new font descriptions from any font description language which the first computer's font interpreter can interpret into such a sequence of moves, lines, and curves. Since all the major font description languages have associated font interpreters which can provide such output, or output which can be easily converted into such a form, this means the invention can be used with all such font description languages, even if they occur in the same document (col. 10, lines 15-27). The CSR includes the capability to model the shape contained in the interpreted description, and to produce a new font description which is virtually independent of any aspects of the interpreted font description which are not required by the shape it represents. The CSR returns this new font description to the document builder, which then places it in the portable documents portable font resource, indexed by the codes used to represent its associated font and character in the portable document's text (col. 9, lines 32-41). In other words, in contrast to the present claims, Collins creates new fonts (new font description) from scratch using the sequences of moves, lines, etc. to mimic the desired font (by converting and modeling) and does not create glyph subsets from an existing font.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 16
Dkt: 2050.028US1

The Lipton reference discusses in an imaging operation, such as printing, a document is examined by a first device to identify characters that are contained in the document. This examination detects fonts appearing in the document and a database is constructed to store the fonts, and the characters within these fonts, that are identified. Once the database is completed, the first device queries the imaging device to check if the required fonts are already stored in its memory. If so, the document data is sent to the imaging device, to be imaged (e.g., printed). If one or more of the required fonts is not present in the imaging device, the required characters for that font are remapped by the first device to a sparse font containing those characters that are needed for the document. If the imaging device has sufficient available memory to store the sparse font, it is downloaded to the imaging device, after which the document data is sent to the imaging device for imaging. If, however, the imaging device does not contain sufficient memory to store all of the sparse fonts that may be needed to image the document, the document is preferably converted into a bit-map, and then imaged.

There is nothing in Collins alone or in combination with Lipton that teaches or suggests,

Claim 15
an electronic device sending a first request for electronic content to an intermediate network device over a first network;

responsive to the sending of the first request for the electronic content, the electronic device receiving modified electronic content from the intermediate network device over the first network, wherein the modified electronic content is created responsive to the first request and includes the electronic content obtained by the intermediate network device over a second network, and one or more directives determined by the intermediate network device, wherein a directive identifies a glyph sub-set including a set of glyphs identified in the modified electronic content and a pre-determined encoding scheme used to encode the set of glyphs;

the electronic device processing the modified electronic content, thereby identifying the one or more directives;

the electronic device sending at least one second request to the intermediate network device based on the one or more identified directives

to request one or more glyph sub-sets to allow the electronic device to
display the modified electronic content;

the electronic device receiving one or more glyph sub-sets from the
intermediate network device in response to the at least one second
request....

Claim 22
an electronic device reading modified electronic content from local
storage on the electronic device, wherein the modified electronic content
includes requested electronic content and one or more directives, wherein
a directive from the one or more directives identifies a glyph sub-set
including a set of glyphs identified in the requested electronic content and
a pre-determined encoding scheme used to encode the set of glyphs;

the electronic device processing the modified electronic content, thereby
identifying the one or more directives, the directives being inserted in the
requested electronic content to create the modified electronic content;

the electronic device determining from the one or more directives whether
a desired glyph sub-set can be obtained from local storage on the
electronic device, and if not,

sending one or more requests over a network to an intermediate network
device to obtain glyph sub-sets that can not be obtained from local storage
on the electronic device;

receiving, from the intermediate network device over the network, the
glyph sub-sets that can not be obtained from local storage from the
intermediate network device on the electronic device....

Neither Collins nor Lipton discusses sending a first (document) request. Collins

uses its document builder to generate the portable document (modified electronic content)

irrespective of receiving a request, and Collins certainly does not create the modified

electronic content, "responsive to the first request and includes the electronic content

obtained by the intermediate network device over a second network," as recited in claim

15, or "wherein the modified electronic content includes requested electronic content and

one or more directives, wherein a directive from the one or more directives identifies a

glyph sub-set including a set of glyphs identified in the requested electronic content and a

pre-determined encoding scheme used to encode the set of glyphs," as recited in claim

22. Additionally, neither reference alone or in combination discloses one or more directives determined by the intermediate network device, wherein a directive identifies a glyph sub-set including a set of glyphs identified in the modified electronic content and a pre-determined encoding scheme used to encode the set of glyphs.

Adding the teachings of Lipton to Collins fails to provide the missing claim elements. The last Office Action agrees in part,

> Collins et al. does not disclose a method in which the directives are added to the document in response to a request. However, Lipton discloses a method in which at the time of request (for printing, imaging, etc.) a font subset is generated and processed for the requested document (column 2, lines 25-61)" (Pages 3 and 4, section 9).

However, the Examiner has mischaracterized Collins and Lipton, specifically with respect to "request," "requested document," "requested electronic document," "a directive," and "a glyph sub-set."

Lipton and Collins do not receive or make a request, do not include a requested document, one or more directives, or a glyph sub-set. As described in detail above, Lipton scans a document for fonts at a first device (e.g., personal computer), queries a second device (printer) to check if it has the font(s), and generates a font set to send to the printer if necessary. The printer does not request the document from the first device and the first device does not request the document from the printer. As discussed above, Collins uses its document builder to generate the portable document (modified electronic content) irrespective of receiving a request, the claim as a whole requires receiving a request prior to obtaining electronic content and generating modified electronic content. For at least the reasons above, neither reference discloses this element expressly or inherently.

The Examiner has stated in the last Office Action in the Response to Arguments section:

> As can be seen in the rejection as presented, Collins teaches that the font subsets are presented due to a request from an intermediate network device and a predetermined encoding scheme is used to encode (using a predetermined coding scheme) the glyphs (column 40, lines 15-29 and column 24, lines 1-28 of Collins). Lipton discloses that a glyph subset

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 19
Dkt: 2050.028US1

may be created on the fly and the content will be modified based at the time of the request (column 2, lines 25-61 of Lipton). The examiner actually points out in the rejection that Collins does not teach that the glyph subset is created on the fly, and that is why the Lipton reference is used.

However, Collins and Lipton discuss fonts. A font is an instance of a typeface, which is a style of character and is a broader term than glyph. As such, these terms are not interchangeable as the previous Office Actions imply. Specifically, Collins discusses creating new fonts (not glyph sub-sets), "model the shape contained in the interpreted description, and to produce a new font description which is virtually independent of any aspects of the interpreted font description." (col. 9, lines 32-41) Lipton creates a sparse font, which comprises a subset of all the characters in the original font. This means the subset of characters is of a specific typeface. A glyph is a specific instance of a character and multiple glyphs may be used to create a character. In other words, two or more characters may share a common glyph, making a glyph subset smaller than a character subset. Because Lipton only discusses creating character subsets, it cannot be creating glyph subsets as recited in the present claims. For at least these reasons, neither Collins nor Lipton disclose creating glyph subsets as recited in the present claims.

Regarding "directives" as presently recited, the Examiner in the last final Office Action states,

> It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the method of using directives for font subsetting of Collins et al. with the method of dynamically creating font subsets of Lipton because it would have always assured that the document will be imaged in the most efficient manner that is consistent with the capabilities of the device.

A directive defined in the claims includes the limitation wherein the "directive identifies a glyph sub-set including a set of glyphs identified in the modified electronic content and a pre-determined encoding scheme used to encode the set of glyphs." The directives are included in the modified electronic content. The Examiner has merely made a broad conclusory statement that it would have been obvious to use a directive, as clearly defined in the claims but not defined at all in any cited reference, in combination

with Collins and Lipton to read on the present claims.   In other words, the Examiner has

concluded a directive was known in the art at the time of the invention without any

supporting evidence. Consequently, based on the only evidence of record, the

combination of Collins and Lipton does not teach each and every element of the present

claims and therefore the claims are not obvious in view of the cited art.

In sum, neither Collins nor Lipton, alone or in combination, has a request for

electronic content (and therefore no "requested document") or modified electronic

content created in response to a request. Independent claim 22 includes substantially the

same limitations as claim 15 and thus the arguments that apply to claim 15 also apply to

claim 22 and their respective dependent claims. Since the combination of Collins and

Lipton do not teach or suggest these claimed elements, a proper prima facie case of

obviousness has not been established, and the rejection should be withdrawn.

C) Discussion of the rejection of claims 1-14 and 28-35 under 35 U.S.C. § 103(a) as

being unpatentable over Simon et al. (US Patent Number 6,065,008, filed on October 1,

1997) in view of Collins et al. (US Patent Number 5,781,714, issued on July 14, 1998)

further in view of Lipton (US Patent Number 5,940,581, issued on August 17, 1999).

Claims 1-14 and 28-35 remain rejected under 35 U.S.C. 103(a) as being

unpatentable over Simon et al. (US Patent Number 6,065,008, filed on October 1, 1997,

hereinafter "Simon") in view of Collins et al. (US Patent Number 5,781,714, issued on

July 14, 1998, hereinafter "Collins") further in view of Lipton (US Patent Number

5,940,581, issued on August 17, 1999, hereinafter "Lipton"). This rejection is

respectfully traversed. The combination of the references does not teach or suggest each

and every element of the claims.

The independent claims 1, 8, 28, 31, and 34 include substantially the same

limitations with respect to "a request," "a requested document," "a requested electronic

document," "a directive," and "a glyph sub-set." as discussed above in reference to

independent claims 15 and 22. Therefore it is respectfully asserted the Examiner has also

mischaracterized Collins and Lipton with respect to these claims for the same reasons as indicated above.

It is submitted that adding the teachings of Simon to Collins and Lipton fails to render independent claims 1, 8, 28, 31, and 34 obvious. Simon discusses a system and method for securely distributing subsetted fonts. The system includes a signing module, a subsetting module, and an authentication module. The signing and subsetting modules are resident at the font designer (or distributor), and the authentication module is resident at the client who requests and receives the subsetted font. The subsetting module subsets the font to form a font subset requested by a client. (col. 2, lines 45-63) Simon merely distributes subsets of fonts in a secure fashion such that it allows the distributor to supply any combination of font subsets, each of which can be easily verified as belonging to the same source, without having to digitally sign each subsetted font. (col. 8, line 66 to col. 9, lines 1-7)

Although a client initiates a request, the request is for a font subset and not for electronic content obtained by an intermediate device from a second network that scans the electronic content to identify one or more sets of glyphs in the requested electronic content used for the plurality of characters in one or more desired languages, as recited in the present claims.

Similar to Collins and Lipton, Simon does not discuss what is recited in claim 1,

responsive to the scanning of the requested electronic content and the creating of the one or more glyph sub-sets, inserting one or more directives in the requested electronic content to identify the one or more glyph sub-sets, thereby creating modified electronic content, wherein a directive from the one or more directives identifies a set of glyphs from the one or more sets of glyphs identified in the requested electronic content and a pre-determined encoding scheme used to encode the set of glyphs

In the Final Office Action (6/28/2005), the Examiner states,

Simon et al. does not disclose that only the glyphs identified in the requested document are used. However, Collins et al. discloses a method in which only glyphs that are used in the document are contained within the portable font (subset) (column 31, lines 31-44 of Collins et al.). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to have combined the methods of Simon et al. and Collins et al. because it would have allowed for more efficient use of available space. Simon et al. does not disclose a method in which directives are inserted into the electronic content to identify the glyph subsets necessary or sending the modified file to the client. However, Collins et al. discloses a method in which portable fonts (subsets) are identified by HTML tags inserted into a web page that point to a file containing the font descriptions and a lookup table for matching the portable font with the logical font record (predetermined encoding scheme) (column 24, lines 1-28, column 29 lines 41-55, and column 31, lines 31-57 of Collins et al.).

As with Collins and Lipton discussed above, and as admitted by the Examiner, Simon does not disclose directives that are inserted into the electronic content to identify the glyph subsets necessary or sending the modified file to the client. As discussed above, the present claims with reference to a directive include the following limitation, "a directive from the one or more directives identifies a set of glyphs from the one or more sets of glyphs identified in the requested electronic content and a pre-determined encoding scheme used to encode the set of glyphs." While Collins may include an HTML tag identifying a PFR (portable font resource) file location, it does not include any information regarding a pre-determined encoding scheme. The tag is merely a reference to a PFR, Collins, "does not embed a PFR in an output document, but rather creates separate PFR files referred to by such PFR tags." (col. 31, lines 45-57)

Therefore, neither Collins, Lipton, nor Simon, alone or in combination, disclose all the elements of independent claims 1, 8, 28, 31, and 34. Since the combination of Collins, Lipton, and Simon do not teach or suggest these claimed elements, a proper prima facie case of obviousness has not been established, and the rejection should be withdrawn.

8. SUMMARY

For at least the reasons argued above, claims 15-18, 20, 22-23, and 25-27 were not properly rejected under 35 U.S.C. 103(a) as being unpatentable over Collins in view of Lipton and claims 1-14 and 28-35 were not properly rejected under 35 U.S.C. 103(a) as being unpatentable over Simon in view of Collins further in view of Lipton.

It is respectfully submitted that the art cited does not render the claim anticipated and that the claims are patentable over the cited art. Reversal of the rejection and allowance of the pending claim are respectfully requested.

Respectfully submitted,

DOUGLAS R. ADLER et al.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
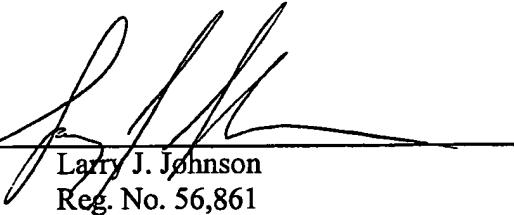
Date 3/27/06   By _____
                          Larry J. Johnson
                          Reg. No. 56,861

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 27 day of March, 2006.

_____Peter Rebuffoni_____   _____
Name   Signature
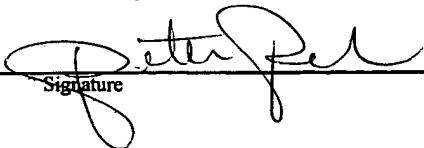
CLAIMS APPENDIX

1.   (Rejected) A method for dynamic font subsetting, the method comprising:

an intermediate network device receiving, over a first network, a first request for requested electronic content from an electronic device;

the intermediate network device obtaining the requested electronic content from a second network, the requested electronic content including a plurality of characters in one or more desired languages;

the intermediate network device scanning the requested electronic content to identify one or more sets of glyphs in the requested electronic content used for the plurality of characters in the one or more desired languages;

creating one or more glyph sub-sets for the one or more identified sets of glyphs, wherein the one or more glyph sub-sets include the sets of glyphs identified in the requested electronic content;

the intermediate network device, responsive to the scanning of the requested electronic content and the creating of the one or more glyph sub-sets, inserting one or more directives in the requested electronic content to identify the one or more glyph sub-sets, thereby creating modified electronic content, wherein a directive from the one or more directives identifies a set of glyphs from the one or more sets of glyphs identified in the requested electronic content and a pre-determined encoding scheme used to encode the set of glyphs; and

the intermediate network device sending the modified electronic content to the electronic device over the first network.

2.   (Rejected) A computer readable medium having stored therein instructions for causing a central processing unit to execute the method of claim 1.

3.   (Rejected) The method of claim 1 wherein receiving the first request comprises:

        receiving a request for electronic content written in a mark-up language selected

from a group of languages that includes standard generalized markup language, hyper

text markup language, compact hyper text markup language, extensible markup language,

handheld device markup language, voice extensible markup language, and wireless

markup language.

4.   (Rejected) The method of claim 1 wherein the creating of the one or more glyph

sub-sets comprises creating one or more glyph sub-sets for glyphs selected from a group

of glyphs comprising Chinese glyphs, Japanese glyphs, Korean glyphs, Vietnamese

glyphs, Hebrew glyphs, and Arabic glyphs.

5.   (Rejected) The method of claim 1 wherein the second network includes a network

selected from a group of networks comprising the Internet, an intranet, and a local area

network.

6.   (Rejected) The method of claim 1 wherein the electronic device includes a device

selected from a group of devices comprising a personal computer, a wireless telephone, a

personal digital assistant, a hand-held computer, a set-top box, and a network appliance.

7.   (Rejected) The method of claim 1 wherein inserting of the one or more directives

in the requested electronic content comprises:

        inserting one or more directives as hyper text markup language meta tags into a

hyper text markup language header associated with the requested electronic content.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 26
Dkt: 2050.028US1

8.   (Rejected) A method for dynamic font subsetting, the method comprising:

an intermediate network device identifying a glyph set in a requested electronic

content obtained by the intermediate network device in response to a first request

received over a first network from an electronic device, wherein the intermediate network

device obtained the requested electronic content over a second network in response to the

first request;

the intermediate network device identifying a glyph sub-set from the glyph set,

the glyph sub-set including glyphs identified in the requested electronic content;

the intermediate network device inserting one or more directives into the

requested electronic content to create modified electronic content, the one or more

directives identifying the glyph set and a pre-determined encoding scheme used to encode

the glyph set;

the intermediate network device receiving a second request from the electronic

device for the glyph sub-set, the request being generated by the electronic device as a

result of the one or more directives;

the intermediate network device obtaining the glyph sub-set; and

the intermediate network device sending the glyph sub-set to the electronic device

over the first network to allow the electronic device to display glyphs in the modified

electronic content.

9.   (Rejected) A computer readable medium having stored therein instructions for

causing a central processing unit to execute the method of claim 8.

10.   (Rejected) The method of claim 8 wherein the obtaining of the glyph subset is

from a database associated with the intermediate network device.

11.   (Rejected) The method of claim 8 wherein the obtaining of the glyph subset comprises:

consulting a database associated with the intermediate network device to determine if the glyph sub-set already exists on the electronic device; and

creating the glyph sub-set if the glyph sub-set does not already exist on the electronic device.

12.   (Rejected) The method of claim 8 wherein the obtaining of the one or more glyph subsets comprises:

creating a database entry for the electronic device in a database associated with the intermediate network device, wherein the database entry includes an identifier for the electronic device and an identifier for the glyph sub-set sent to the electronic device by the intermediate network device.

13.   (Rejected) The method of claim 8 wherein the receiving of the request comprises:

receiving one or more requests for modified electronic content including one or more directives written in a mark-up language selected from a group of languages including standard generalized markup language, hyper text markup language, compact hyper text markup language, extensible markup language, handheld device markup language, voice extensible markup language, and wireless markup language.

14.   (Rejected) The method of claim 8 wherein the obtaining of the glyph sub-set comprises:

obtaining one or more glyph sub-sets for glyphs selected from a group of glyphs comprising Chinese glyphs, Japanese glyphs, Korean glyphs, Vietnamese glyphs, Hebrew glyphs, and Arabic glyphs.

15.   (Rejected) A method for dynamic font subsetting, the method comprising:

an electronic device sending a first request for electronic content to an intermediate network device over a first network;

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 28
Dkt: 2050.028US1

responsive to the sending of the first request for the electronic content, the electronic device receiving modified electronic content from the intermediate network device over the first network, wherein the modified electronic content is created responsive to the first request and includes the electronic content obtained by the intermediate network device over a second network, and one or more directives determined by the intermediate network device, wherein a directive identifies a glyph sub-set including a set of glyphs identified in the modified electronic content and a pre-determined encoding scheme used to encode the set of glyphs;

the electronic device processing the modified electronic content, thereby identifying the one or more directives;

the electronic device sending at least one second request to the intermediate network device based on the one or more identified directives to request one or more glyph sub-sets to allow the electronic device to display the modified electronic content;

the electronic device receiving one or more glyph sub-sets from the intermediate network device in response to the at least one second request; and

the electronic device displaying the modified electronic content using the one or more glyph sub-sets.

16. (Rejected) A computer readable medium having stored therein instructions for causing a central processing unit to execute the method of claim 15.

17. (Rejected) The method of claim 15 wherein the electronic device includes a device selected from a group of devices comprising a personal computer, a wireless telephone, a personal digital assistant, a hand-held computer, a set-top box, and a network appliance.

18. (Rejected) The method of claim 15 wherein receiving modified electronic content comprises:

receiving modified electronic content with a plurality of font tags written in a mark-up language selected from a group of languages including standard generalized

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 29
Dkt: 2050.028US1

markup language, hyper text markup language, compact hyper text markup language, extensible markup language, handheld device markup language, voice extensible markup language, and wireless markup language.

19.   (Rejected) The method of claim 15 wherein receiving one or more glyph sub-sets from the intermediate network device comprises:

receiving one or more glyph sub-sets for glyphs selected from a group of glyphs comprising Chinese glyphs, Japanese glyphs, Korean glyphs, Vietnamese glyphs, Hebrew glyphs, and Arabic glyphs.

20.   (Rejected) The method of claim 15 wherein processing the modified electronic content comprises:

identifying one or more directives as hyper text markup language meta tags into a hyper text markup language header associated with the modified electronic content.

21.   (Cancelled)

22.   (Rejected) A method for dynamic font sub setting, the method comprising:

an electronic device reading modified electronic content from local storage on the electronic device, wherein the modified electronic content includes requested electronic content and one or more directives, wherein a directive from the one or more directives identifies a glyph sub-set including a set of glyphs identified in the requested electronic content and a pre-determined encoding scheme used to encode the set of glyphs;

the electronic device processing the modified electronic content, thereby identifying the one or more directives, the directives being inserted in the requested electronic content to create the modified electronic content;

the electronic device determining from the one or more directives whether a desired glyph sub-set can be obtained from local storage on the electronic device, and if not,

sending one or more requests over a network to an intermediate network device to obtain glyph sub-sets that can not be obtained from local storage on the electronic device;

receiving, from the intermediate network device over the network, the glyph sub-sets that can not be obtained from local storage from the intermediate network device on the electronic device; and

displaying the modified electronic content on the electronic device using the glyph sub-sets obtained from the intermediate network device.

23.   (Rejected) A computer readable medium having stored therein instructions for causing a central processing unit to execute the method of claim 22.

24.   (Rejected) The method of claim 22 wherein the one or more glyph sub-sets include glyphs selected from a group of glyphs comprising Chinese glyphs, Japanese glyphs, Korean glyphs, Vietnamese glyphs, Hebrew glyphs, and Arabic glyphs.

25.   (Rejected) The method of claim 22 wherein processing the electronic content comprises:

identifying one or more directives as hyper text markup language meta tags into a hyper text markup language header associated with the modified electronic content.

26.   (Rejected) The method of claim 22 wherein the electronic device includes a device selected from a group of devices comprising a personal computer, wireless telephone, personal digital assistant, hand-held computer, set-top box, and network appliance.

27.   (Rejected) The method of claim 22 further comprising:

determining from the one or more directives in the modified electronic content whether a desired glyph sub-set can be obtained from local storage on the electronic device, and if so,

displaying the modified electronic content on the electronic device using the one
or more glyph sub-sets obtained from local storage.

28.   (Rejected) A dynamic font subsetting system, comprising:

modified electronic content including requested electronic content as obtained by
an intermediate network device over a first network and sent to an electronic device over
a second network in response to a first request from the electronic device for the
requested electronic content, and further including one or more directives for identifying
one or more glyph sub-sets, the one or more glyph sub-sets including sets of glyphs
identified in the requested electronic content, and one or more pre-determined encoding
schemes used to encode the sets of glyphs, wherein the sets of glyphs are used to
represent a plurality of characters in one or more desired languages included within the
requested electronic content; and

the electronic device to request the requested electronic content and to receive and
display the modified electronic content, wherein the electronic device does not have
stored information for all glyphs for all characters in the one or more desired languages.

29.   (Rejected) The dynamic font subsetting system of claim 28 further comprising the
intermediate network device to

receive the first request from the electronic device for the requested electronic
content,

obtain the requested electronic content from the first network, the requested
electronic content including the plurality of characters in the one or more desired
languages,

scan the requested electronic content to identify the sets of glyphs in the requested
electronic content used for the plurality of characters in the one or more desired
languages,

create the one or more glyph sub-sets for the sets of glyphs, wherein the one or
more glyph sub-sets include the sets of glyphs identified in the requested electronic
content,

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 32
Dkt: 2050.028US1

insert the one or more directives in the requested electronic content to identify the
one or more glyph sub-sets, thereby creating the modified electronic content, wherein a
directive identifies a glyph sub-set including a set of glyphs identified in the requested
electronic content and an encoding scheme used to encode the set of glyphs,

send the modified electronic content to the electronic device over the second
network.

30. (Rejected) The dynamic font subsetting system of claim 29 further comprising:

a database associated with the intermediate network device to store the one or
more glyph sub-sets including sets of glyphs obtained or created by the intermediate
network device to display the modified electronic content on the electronic device and to
store database entries for a plurality of electronic devices, wherein a database entry
includes an identifier for the electronic device and a list of one or more glyph sub-sets
obtained or created by the intermediate network device for the electronic device.

31. (Rejected) A method performed by an intermediate network device, the method
comprising:

receiving, over a first network, a first request for requested electronic content
from a portable electronic device;

obtaining the requested electronic content from a second network, wherein the
requested electronic content includes a plurality of characters in one or more desired
languages;

scanning the requested electronic content to identify one or more sets of glyphs in
the requested electronic content used for the plurality of characters;

creating one or more glyph sub-sets for the one or more identified sets of glyphs,
wherein the one or more glyph sub-sets include glyphs identified in the requested
electronic content;

inserting one or more directives in the requested electronic content to identify the
one or more glyph sub-sets, thereby creating modified electronic content; and

sending the modified electronic content to the electronic device over the first

network.

32.   (Rejected) The method of claim 31, further comprising:

receiving, over the first network and in response to sending the modified

electronic content, at least one second request from the electronic device for the one or

more glyph sub-sets; and

sending the one or more glyph sub-sets to the electronic device over the first

network.

33.   (Rejected) The method of claim 31, wherein the first network and the second

network are a same network.

34.   (Rejected) A method performed by an electronic device, the method comprising:

sending a first request for electronic content to an intermediate network device

over a first network;

responsive to the sending of the first request, receiving modified electronic

content from the intermediate network device over the first network, wherein the

modified electronic content is created responsive to the first request, and includes the

electronic content obtained by the intermediate network device over a second network,

and one or more directives, which identify one or more glyph sub-sets corresponding to a

set of glyphs identified by the intermediate network device from the electronic content;

sending at least one second request to the intermediate network device, based on

the one or more directives, to request the one or more glyph sub-sets;

receiving the one or more glyph sub-sets from the intermediate network device in

response to the at least one second request; and

displaying the modified electronic content using the one or more glyph sub-sets.

35.   (Rejected) The method of claim 34, wherein the first network and the second

network are a same network.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 34
Dkt: 2050.028US1

EVIDENCE APPENDIX

None.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37
Serial Number: 09/576,754
Filing Date: May 23, 2000
Title: METHOD AND SYSTEM FOR DYNAMIC FONT SUBSETTING

Page 34
Dkt: 2050.028US1

RELATED PROCEEDINGS APPENDIX

None.